

Patient Id: Accession: Sample Id:

**Pathogen Detected Physician Review** Recommended

**OmniHealth Diagnostics** 

1840 N GREENVILLE AVE PHONE: (972) 887 - 3444

**RICHARDSON, TX 75081** 

CLIA: 45D2089485 **DIRECTOR: David Mehr MD** 

Patient Name: TEST PATIENT

Ordering Clinician: Test Provider NPI:

**Date Collected:** 

Sex:

**Date Received: Date Reported:** 

ICD10: N39.0

**Patient Address: Patient Phone:** 

Date of Birth:

Clinician Phone:

Clinician Address:

Submitting Facility:

MRN: **Antibiotic Allergies:** No antibiotic allergies reported.

# **DETECTED RESULT SUMMARY**

UTI			
ANTIBIOTIC RESISTANCE	RESULT	CrT/CT	Cutoff Threshold
ERMB	DETECTED		< 34
TEM	DETECTED		< 34
UTI			
ENTEROCOCCUS FAECALIS	DETECTED		< 34
ESCHERICHIA COLI	DETECTED		< 34
UREAPLASMA UREALYTICUM	DETECTED		< 34

Methodology Statement: Testing is performed using Real-Time PCR assays. The panel detects a wide array of clinical significant bacteria and viruses at an analytical specificity and sensitivity of >99%. An absence of detection does not imply the absence of microorganisms other than those listed nor excludes the possibility that the target sequence is present below the limit of detection. This report should be interpreted in conjunction with other clinical findings for the administration of a specific treatment regime.

Report Generated: 7/2/2025 10:15:31 PM



Patient Id: Accession: Sample Id:

URINE **Pathogen Detected** 

**Date Collected:** 

**Physician Review** Recommended

**OmniHealth Diagnostics** 

**1840 N GREENVILLE AVE** PHONE: (972) 887 - 3444

**Patient Name:** 

**RICHARDSON, TX 75081** CLIA: 45D2089485

**DIRECTOR: David Mehr MD** 

Date of Birth: Sex: NPI: **Date Received: Patient Address:** Clinician Address: **Date Reported:** 

**Ordering Clinician:** 

ICD10: N39.0

**Patient Phone:** Clinician Phone: **Submitting Facility:** MRN:

## **RESULT SUMMARY**

NTIBIOTIC RESISTANCE	RESULT	CrT/CT	Cutoff Threshold
AMPC	NOT DETECTED		
CTX-M GROUP 1	NOT DETECTED		
CTX-M GROUP 2	NOT DETECTED		
ERMA	NOT DETECTED		
ERMB	DETECTED		< 34
FEMA	NOT DETECTED		104
KPC	NOT DETECTED		
MECA	NOT DETECTED		
MEFA	NOT DETECTED		
NDM	NOT DETECTED		
OXA-48	NOT DETECTED		
QNRA	NOT DETECTED		
QNRB	NOT DETECTED		
SHV			
	NOT DETECTED		- 24
TEM	DETECTED		< 34
VANCO A	NOT DETECTED		
VANCO B	NOT DETECTED		
VIM/IMP-7	NOT DETECTED		
1	NAT		
ACINETOBACTER BAUMANNII	NOT DETECTED		
CANDIDA ALBICANS	NOT DETECTED		
CANDIDA AURIS	NOT DETECTED		
CANDIDA GLABRATA	NOT DETECTED		
CANDIDA KRUSEI	NOT DETECTED		
CANDIDA LUSITANIAE	NOT DETECTED		
CANDIDA PARAPSILOSIS	NOT DETECTED		
CANDIDA TROPICALIS	NOT DETECTED		
CITROBACTER FREUNDII	NOT DETECTED		
ENTEROBACTER CLOACAE	NOT DETECTED		
ENTEROCOCCUS FAECALIS	DETECTED		< 34
ENTEROCOCCUS FAECIUM	NOT DETECTED		
ESCHERICHIA COLI	DETECTED		< 34
KLEBSIELLA AEROGENES	NOT DETECTED		
KLEBSIELLA OXYTOCA	NOT DETECTED		
KLEBSIELLA PNEUMONIAE	NOT DETECTED		
MORGANELLA MORGANII	NOT DETECTED		
MYCOPLASMA HOMINIS	NOT DETECTED		
PROTEUS MIRABILIS	NOT DETECTED		
PROTEUS VULGARIS	NOT DETECTED		
PROVIDENCIA STUARTII	NOT DETECTED		
PSEUDOMONAS AERUGINOSA	NOT DETECTED		
SERRATIA MARCESCENS	NOT DETECTED		
STAPHYLOCOCCUS AUREUS	NOT DETECTED		

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Tests results must be interpreted with clinical observations, patient history, epidemiological information and other diagnostic information necessary to determine patient infection status. This test cannot detect other pathogens not tested, and thus cannot rule out infection or coinfection with bacterial or other viral pathogens. Samples must be collected, transported, and stored using appropriate procedures and conditions. Improper collection, transport, or storage of specimens may hinder the ability of the assays to detect the target sequences.



Patient Id: Accession: Sample Id: URINE

Pathogen Detected
Physician Review
Recommended

**OmniHealth Diagnostics** 

1840 N GREENVILLE AVE PHONE: (972) 887 - 3444 RICHARDSON, TX 75081

CLIA: 45D2089485

**DIRECTOR: David Mehr MD** 

**Patient Name:** 

Ordering Clinician:

**Date Collected:** 

Date of Birth: Sex:
Patient Address:

NPI: Date Received:

Clinician Address: Date Reported: ICD10: N39.0

Patient Phone: Clinician Phone:

MRN: Submitting Facility:

**UTI (Continued)** 

UTI RESULT CrT/CT Cutoff Threshold

STAPHYLOCOCCUS SAPROPHYTICUS STREPTOCOCCUS AGALACTIAE

NOT DETECTED NOT DETECTED

UREAPLASMA UREALYTICUM DETECTED

**CTED** < 34

Methodology Statement: Testing is performed using Real-Time PCR assays. The panel detects a wide array of clinical significant bacteria and viruses at an analytical specificity and sensitivity of >99%. An absence of detection does not imply the absence of microorganisms other than those listed nor excludes the possibility that the target sequence is present below the limit of detection. This report should be interpreted in conjunction with other clinical findings for the administration of a specific treatment regime.

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Name: Test Patient DOB: Gender: Facility: Provider: Allergies/Notes:

Panel: UTI
Sample ID:
Collection Date:
Reported Date:

## **DETECTED PATHOGENS DETECTED** -**ESCHERICHIA COLI** Gram-negative organism(s), may be responsible for UTI. Gram-positive organism, frequent colonizer of genitourinary tract. May cause UTI, more commonly implicating males and patients with **ENTEROCOCCUS FAECALIS DETECTED** recurrent/complicated UTIs (i.e. catheters, immunocompromised, nosocomial infections). May be part of normal genital flora. Associated genitourinary disease may include urethritis, epididymitis, prostatitis, and pregnancy related disorders. Data establishing Ureaplasma spp as an etiologic agent is inconsistent. **UREAPLASMA UREALYTICUM DETECTED** -Treatment may be considered with high organism load or if Ureaplasma spp is the sole organism detected. Treatment options include doxycycline, azithromycin, and levofloxacin.

# **DETECTED RESISTANCE GENES**

ERMB

DETECTED 
Confers resistance to macrolides, linacosamides (clindamycin), and streptogramins. Expressed primarily by gram-positive organisms.

TEM

DETECTED 
Extended Spectrum Beta-lactamase (ESBL): Confers resistance to penicillins, penicillins, penicillins, penicillins, most cephalosporins, aztreonam. Expressed only by select gram-negative organisms.

## PHARMD TREATMENT CONSIDERATIONS

Regimens based on organisms most likely to be pathogenic. Microbial load considered when available.

Medication	Dose/Duration	Renal Adjustment	Considerations	
Fosfomycin (Monurol)	Cystitis: 3 g PO x 1 dose (x 3 doses every 48-72 hrs for complicated cystitis) Pyelonephritis: Avoid use	None	Coverage for: ESCHERICHIA COLI, ENTEROCOCCUS FAECALIS  • \$31-51 for treatment course †  • May repeat dosing every 48-72 hrs up to a total of 1-3 doses	
		OR		
Nitrofurantoin (Macrobid)	Cystitis: 100 mg PO BID x 5 d (7 d for complicated cystitis) Pyelonephritis: Avoid use	Avoid use in pts with CrCl < 30 mL/min	Coverage for: ESCHERICHIA COLI*, ENTEROCOCCUS FAECALIS • \$16-21 for 7 day course †	
	•	OR	•	
TMP/SMX (Bactrim, Septra)	Cystitis: 160/800 mg PO BID x 3 d (7 d for complicated cystitis) Pyelonephritis: 160/800 mg PO BID x 10-14 d	CrCl 15-30 mL/min: 80/400 mg PO BID CrCl < 15 mL/min: Use not recommended	Coverage for: ESCHERICHIA COLI*  • \$15-28 for 7 day course †  • May cause hyperkalemia (caution with ACEI, ARBs, ARAs)  • Avoid in sulfa allergy	
		OR		
Levofloxacin (Levaquin)	Cystitis: 250-500 mg PO daily x 3 d (5-7 d for complicated cystitis)  Pyelonephritis: 750 mg PO daily x 7-10 d	CrCl < 50 mL/min: 500-750 mg every other day, no adjustment for necessary for 250 mg dose	Coverage for: ESCHERICHIA COLI*, ENTEROCOCCUS FAECALIS  • \$10-23 for 5 day course †  • FQ class-wide warnings include: CNS toxicity, peripheral neuropathy, myasthenia gravis, aortic dissection, tendinopathy, QT interval prolongation, C.difficile colitis	

<sup>\*</sup> Displays variable activity vs pathogen

<sup>†</sup> Based on available online coupons

#### **Resistance Genes**

SHV, TEM, CTX-M (ESBLs) confer resistance to penicillins, penicillin-BLI combinations, most cephalosporins, and aztreonam. Fosfomycin displays positive activity (+) vs ESBL-producing E. Coli and Klebsiella spp. Nitrofurantoin, TMP/SMX, and fluoroquinolones display variable activity (±) and may be considered for mild disease (e.g. uncomplicated cystitis). Treatment with carbapenems (e.g. ertapenem) may be warranted for moderate-severe disease (cUTI, pyelonephritis).

### **Additional Considerations**

Complicating factors include: Male patients, pregnant women, obstruction, immunosuppression, renal failure, renal transplantation, urinary retention from neurologic disease, uncontrolled diabetes, and individuals with risk factors that predispose to persistent or relapsing infection (e.g., calculi, indwelling catheters or other drainage devices). For males in which acute prostatitis is suspected, fluoroquinolones and TMP/SMX are preferred due to reliable penetration of prostatic tissue.

Reviewed by: Lauren Koscal, PharmD, BCPS <u>Date:</u> 7/2/2025 (PS62467)

The following regimen(s) are based on generally accepted and peer-reviewed antimicrobial activity of specific agents against detected pathogens, resistance genes, and presumed diagnosis based on specimen source and resulting pathogens. Antimicrobial activity and efficacy of agents for treatment of detected pathogens is not guaranteed. Medication selection, dosages, durations, and considerations are in congruence with clinical practice guidelines (IDSA, CDC, AAP, etc), when guidance is available. Additional patient factors including but not limited to HPI, comorbidities, concomitant medications, etc. should be carefully evaluated in conjunction with lister teatment considerations. Clinical correlation and appropriate medical judgment is warranted prior to prescribing a course of treatment.



Have a question about a report? Scan the QR code to chat with a pharmacist or call 904-618-3554.



Disclaimer: Treatment considerations and therapeutic guidance is generated by ChoicePharmD, LLC and is not affiliated with the testing laboratory.